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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/797,523

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EXAMINER

POLLACK, MELVIN H

ART UNIT

PAPER NUMBER

2445

MAIL DATE

DELIVERY MODE

07/20/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/797,523	Applicant(s) WANG ET AL.	
	Examiner MELVIN H. POLLACK	Art Unit 2445	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>see attached office action</u> . |

Art Unit: 2445

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01 May 2009 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

3. In light of the amendment and remarks, examiner modifies the original rejection based on the description of the negotiation in Paras. 23-26 and 38-42 of the specification. These terms are read in their broadest reasonable interpretation to one of ordinary skill in the art.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-9, 11-17, 25, 29-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Yanosy (2003/0217128).

Art Unit: 2445

6. For claims 1, 12, 25, Yanosy teaches a method and system (abstract) of managing resources of a service-oriented information system (Paras. 1-15 and 42-43), the method performed by a processor configured with memory included in the system (Paras. 20-21), the method comprising:

- a. providing information services, quality of service (QoS) management services, and resource management services to a plurality of client applications through an information broker of the system (Paras. 16-19);
- b. receiving a quality of service (QoS) message from a client application (application QOS negotiator 60) expressing at least one QoS requirement as at least one parameter value (Paras. 18, 27-31);
- c. notifying the client that the at least one QoS requirement is denied (Paras. 29-33);
- d. receiving a revised QoS message from the client and negotiating a contract with the client for quality of service based on the revised message (Paras. 34-37); and
- e. allocating at least one resource of the system to the client based on the contract (Paras. 40-41);
- f. the receiving, notifying, and allocating steps performed through, the information broker (Figs. 1, 5, and 6).

7. For claims 2, 13, 29, Yanosy teaches that the client expresses the at least one QoS requirement in a plurality of categories of QoS characteristics (Paras. 24-26).

8. For claims 3, 14, Yanosy teaches, through the broker, governing interaction of the client with the system based on the contract (Paras. 27-29).

Art Unit: 2445

9. For claims 4, 15, Yanosy teaches receiving a plurality of QoS messages from a plurality of the clients, and allocating resources of the system based on a resource allocation policy (Paras. 27-31).
10. For claims 5, 16, Yanosy teaches allocating at least one resource comprises using a common management interface to implement at least one self- configurable resource (Para. 32).
11. For claims 6, 17, Yanosy teaches implementing at least one self- configurable resource comprises implementing a resource as an object of a subclass of an abstract resource class (Paras. 20-21).
12. For claim 7, Yanosy teaches using the at least one parameter value to set at least one QoS value for the at least one resource (Paras. 25-26).
13. For claims 8, 30, Yanosy teaches monitoring QoS parameters in the contract at runtime, and adapting the allocation of resources and their parameters in response to a variance by the client from the contract (Paras. 27-31).
14. For claims 9, 32, Yanosy teaches that establishing a contract comprises allowing the client to revise the parameter values to become consistent with a resource allocation policy of the system (Paras. 40-41).
15. For claim 11, Yanosy teaches receiving a plurality of QoS messages from a plurality of clients preparing to publish or subscribe a message or request a task execution, and establishing contracts with the clients for quality of service based on their requirements expressed in the QoS messages (Paras. 27-31).

Art Unit: 2445

16. For claim 31, Yanosy teaches a prediction service configured to track system conditions in terms of the at least one QoS parameter; and predict a future system condition based on the tracked conditions (Paras. 38-39).

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 10, 18-24, 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanosy as applied to claims 1, 12 above, and further in view of Loewy et al. (2004/0193703).

19. For claims 10, 18, 26 - 28, Yanosy does not expressly disclose that the information system includes a service-oriented architecture (SOA), said method performed as a service invoked by the client. Loewy teaches a method and system (abstract) of QoS negotiation (Paras. 1-46, 232-233) including an SOA (Paras. 47-48) to perform QoS as services (Paras. 87-88, 213). At the time the invention was made, one of ordinary skill in the art would have added Loewy to Yanosy in order to improve scalability (Paras. 4-5).

20. For claim 19, Yanosy teaches a quality of service (QoS) management service (abstract) for use in an enterprise system (Paras. 1-15, 42-43), the QoS management service comprising a processor and memory of the enterprise system and a broker for a plurality of component services (Paras. 20-21), the broker configured in the memory and executable by the processor to:

- a. receive a QoS message from a service requester of the enterprise system (Paras. 18, 27-31) expressing at least one QoS parameter (Paras. 25-26);

Art Unit: 2445

- b. notify the service requester that the at least one QoS parameter is unacceptable (Paras. 29-33);
 - c. create a contract with the service requester for quality of service based on a revised QoS message received from the service requester (Paras. 34-37);
 - d. monitor the QoS parameters in the contract (Paras. 16-19); and
 - e. manage at least one resource of the enterprise system based on the monitoring (Paras. 40-41).
20. Yasovy does not expressly disclose the enterprise system having a service oriented architecture (SOA). Loewy teaches this limitation (Paras. 47-48).
21. For claim 20, Yanosy teaches that the component services are further configured to adapt at least one resource of the enterprise system based on the monitoring (Paras. 24-29).
22. For claim 21, Yanosy teaches that the component services are made available to the service requester by the processor through the broker (Figs. 1, 5, 6).
23. For claim 22, Yanosy teaches that the component services are configured to manage a plurality of resources of the enterprise system based on a plurality of QoS contracts with a plurality of service requesters (Paras. 27-31).
24. For claim 23, Yanosy teaches that the plurality of service requesters comprise tasks and messages (Paras. 20-26).
25. For claim 24, Yanosy teaches that the component services are configured in a middleware layer of the enterprise system (Para. 26).

Conclusion

Art Unit: 2445

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELVIN H. POLLACK whose telephone number is (571)272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melvin H Pollack/
Examiner, Art Unit 2445
15 July 2009